

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (121) - Quiz 6

Name:

ID:

Serial No.:

1. Use L'Hoptial's rule to find the limits

$$\lim_{x \rightarrow \infty} \left(\frac{x^2 + 1}{x + 2} \right)^{1/x}$$

2. Consider the function

$$g(x) = \frac{8x}{x^2 + 4}$$

- (a) Find the local extreme values.
- (b) Find the inflection points (if any).